Marlene H. Dortch
Secretary
Federal Communications Commission
TW-A325
445 Twelfth St., SW
Washington, DC 20554

MEDIA ACCESS PROJECT

Re: *Notice of Ex Parte Presentation in ET Docket No. 04-151*

Dear Ms. Dortch:

On January 27, 2005, Harold Feld of Media Access Project (representing the Champaign Urbana Wireless Network), Ben Scott of Free Press, and Michael Calabrese of New America Foundation (collectively, NAF, *et al.*) met with Ed Thomas, James Schlicting, and Alan Scrime of the Federal Communications Commission Office of Engineering and Technology.

NAF, *et al.* and staff discussed concerns regarding registration procedures for unlicensed devices operating in the 3650-3700 MHz band. Both staff and NAF, *et al.* were in agreement that unlicensed providers such as WISP and rural communities shouldn't be overly burdened by a centralized bureaucratic registration scheme. NAF, *et al.* expressed concern that a site licensing procedure modeled on the 79-90 GHz would best suit the needs of such providers. . In particular, NAF, *et al.* stated that it would be disastrous to create a "first in time, first in right" regime that protected the first entrant from interference from any new entrants or from low power devices. Such a scheme would give the first person to deploy in a geographic area the ability to dictate entry conditions for new entrants and act like a standard geographic licensee, but without constraints and without returning revenue to the public. Worse, the "first in time" would have incentive to maximize coverage area and to remain broadcasting at maximum power 24/7 to squat on the maximum amount of spectrum.

NAF, *et al.* suggested several possible ways to mitigate interference concerns: 1) require registration of high-power users but rely upon good faith negotiation rather than either spectrum coordinators or "first in time, first in right." Since all parties will have incentive to cooperate with each other in a timely fashion, and since identification beacons in high-power devices will allow users to easily find one another, voluntary cooperation is much more feasible than has traditionally been the case. 2) Limit high power to rural areas, thus alleviating possible crowding. Rural areas are most in need of high-power for both back-haul and "hub-and-spoke" architecture, whereas urban devices can deploy mesh networks and frequently do not need long backhaul to a competitive backhaul market. Since devices will have geographic awareness to protect incumbents, devices can be limited in power based on population density. 3) Require that high-power devices use only pencil-thin beams (or, at the least, phased array "smart antennas") and be limited to point-to-point links. This will make it possible for devices to avoid interference with each other and with low-power devices. 4) Require interference avoidance techniques to be built into devices other than "listen before talk" that would require devices to cooperate better.

NAF, *et al.* also expressed concern on how low-power devices would operate in the presence of high-power devices. In urban areas, community wireless networks (CWNs) generally rely on low-power mesh networks rather than high power. High power omni-systems would interfere with

such uses, and would create "blanketing interference" for mobile devices. NAF, *et al.* also asked how peer-to-peer devices would communicate depending upon the protection scheme adopted by the Commission for incumbents. For example, if the Commission required that a device contact a "master database," as proposed in 04-186, would the Commission require low-power devices to receive similar permission as high-power devices. NAF, *et al.* argued that this would prove wasteful and unnecessary, given the low power levels at issue. Instead, the Commission should rely on geo-awareness technology.

In accordance with Section 1.1206(b) of the Commission's Rules, 47 C.F.R. § 1.1206, this letter is being filed with your office. If you have questions, please do not hesitate to contact me.

Respectfully Submitted,

Harold Feld
Senior Vice President

CC: Ed Thomas
James Schlichting
Alan Scrime